

**What is claimed is:**

- 1 1. A method for operating a mobile unit, comprising the steps of:  
2 determining a future location coordinate of a mobile unit; and  
3 selecting a protocol, for use by the mobile unit, based on the future location coordinate.
- 1 2. The method of claim 1, further comprising the steps of:  
2 receiving signals representing a location and corresponding time coordinate of the mobile  
3 unit;  
4 determining a path of motion of the mobile unit based on the received signals; and  
5 determining the future location coordinate based on the path of motion.
- 1 3. The method of claim 2, further comprising the steps of:  
2 receiving signals representing a plurality of location and corresponding time coordinates of  
3 the mobile unit; and  
4 determining the path of motion by calculating a direction of the mobile unit based on the  
5 plurality of location and time coordinates.
- 1 4. The method of claim 2, further comprising the steps of:  
2 storing previous location and time coordinates of the mobile unit in a historical database;  
3 obtaining a coordinate representing at least one of a current time and a current location of the  
4 mobile unit; and  
5 performing a lookup in the historical database based on the obtained coordinate to determine  
6 an expected path of motion for the mobile unit.
- 1 5. The method of claim 2, further comprising the steps of:  
2 maintaining a protocol database associating a protocol with at least one region;  
3 obtaining a coordinate representing a current location of the mobile unit;  
4 determining a present region in the protocol database based on the current location of the  
5 mobile unit; and  
6 determining the future location coordinate as a boundary of the present region in the protocol  
7 database that intersects the path of motion, wherein the boundary separates the present region from  
8 an adjacent region.

- 1    6.     The method of claim 5, wherein the selecting step further comprises the step of:  
2         selecting the protocol associated with the adjacent region in the protocol database.
- 1    7.     The method of claim 6, further comprising the step of:  
2         revising the protocol database based on service of quality data corresponding to the mobile  
3         unit.
- 1    8.     The method of claim 6, further comprising the step of:  
2         revising the protocol database based on detected changes in environmental conditions.
- 1    9.     The method of claim 1, further comprising the step of:  
2         initiating operations according to the selected protocol while substantially operating using a  
3         present protocol.
- 1    10.    The method of claim 1, further comprising the steps of:  
2         operating an application in the mobile unit to process data according to a present protocol;  
3         and  
4         altering operations of the application to process data according to the selected protocol at a  
5         time substantially contemporaneous with the mobile unit's arrival at a location corresponding to the  
6         future location coordinate.
- 1    11.    The method of claim 10, further comprising the step of:  
2         operating the application to conduct a data session, wherein the data session is maintained  
3         while the operations of the application are altered.
- 1    12.    The method of claim 9, wherein the present and selected protocols each correspond to a  
2         different communication network selected from the group consisting of at least: a wireless local area  
3         network (Wavelan) and a cellular network.

- 1 13. A mobile unit operable to:  
2 determine a future location coordinate of the mobile unit; and  
3 select a protocol, for use by the mobile unit, based on the future location.
- 1 14. The mobile unit of claim 13, further operable to:  
2 receive signals representing a plurality of location and corresponding time coordinates;  
3 determine a path of motion, wherein the path of motion includes a present location and a  
4 direction calculated based on the plurality of location and corresponding time coordinates; and  
5 determine the future location coordinate based on the path of motion.
- 1 15. The mobile unit of claim 14, further operable to:  
2 perform a lookup in a protocol database based on the path of motion, wherein the protocol  
3 database associates a protocol with each of at least one region;  
4 determining a present region based on the performed lookup;  
5 and selecting the protocol associated with the present region in the protocol database.
- 1 16. The mobile unit of claim 13, further operable to:  
2 initiate operations according to the selected protocol while substantially operating using a  
3 present protocol.
- 1 17. The mobile unit of claim 13, further operable to:  
2 operate an application to process data according to a present protocol; and  
3 alter operations of the application to process data according to the selected protocol at a time  
4 substantially contemporaneous with an arrival at a location corresponding to the future location.
- 1 18. A base station operable to:  
2 maintain a protocol database associating a protocol with each of at least one region;  
3 obtain a path of motion for a mobile unit, wherein the path of motion includes a current  
4 location and a direction of the mobile unit;  
5 determine a present region in the protocol database based on the current location of the  
6 mobile unit; and

7           determine a future location coordinate of the mobile unit as a boundary of the present region  
8 in the protocol database that intersects the path of motion, wherein the boundary separates the  
9 present region from an adjacent region.

1   19.     The base station of claim 18, further operable to:  
2           receive signals representing the path of motion of the mobile unit.

1   20.     The base station of claim 18, further operable to:  
2           receive signals representing a plurality of location and corresponding time coordinates of the  
3 mobile unit;  
4           store the received location and corresponding time coordinates in a historical database;  
5           obtain a coordinate representing at least one of a current time and a current location of the  
6 mobile unit; and  
7           perform a lookup of the historical database based on the obtained coordinate to determine an  
8 expected path of motion for the mobile unit.

1   21.     The base station of claim 18, further operable to:  
2           receive signals from a mobile unit representing service quality data relating to the mobile  
3 unit's current location; and  
4           update the protocol database based on the service quality data.

1   22.     The base station of claim 21, further operable to:  
2           update boundaries of the at least one region in the protocol database based on the service  
3 quality data.

1   23.     A mobile unit comprising:  
2           means for determining a future location coordinate of the mobile unit; and  
3           means for selecting a protocol, for use by the mobile unit, based on the future location.

1 24. A base station comprising:  
2 means for maintaining a protocol database associating a protocol with each of at least one  
3 region;  
4 means for obtaining a path of motion for a mobile unit, wherein the path of motion includes a  
5 current location and a direction of the mobile unit;  
6 means for determining a present region in the protocol database based on the current location  
7 of the mobile unit; and  
8 means for determining a future location coordinate of the mobile unit as a boundary of the  
9 present region in the protocol database that intersects the path of motion, wherein the boundary  
10 separates the present region from an adjacent region.